

8500203

TO ALL TO WHOM THESE: PRESENTS SHALL COME:

Garpool Seed Inc.

Concreas. There has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLI-CANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EX-CLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT riety therefrom, to the extent provided by the Plant Variety Protection Act AT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Milburn'

In Testimony Wanercot, I have hereunto set my hand and caused the seal of the Plant Tariety Protection Office to be affixed Washington, D. C. at the City of this 31st day of the year of our Lord one thousand nine hundred and eighty-eight.

Rila I E. Fyng Secretary of Agriculture

Plant Variety Protection Office

Agricultural Marketing Service

		APPROVAL EXPIRES 4-30-85
U.S. DEPARTMENT OF AGRICULTU		FORM APPROVED: OMB NO. 0581-0058
AGRICULTURAL MARKETING SERV WAREHOUSE & SEED DIVISION		Application is required in order to determine if a plant variety protection certificate is to
		be issued (7 U.S.C. 2421). Information is
APPLICATION FOR PLANT VARIETY PROTECT (Instructions on reverse)	CTION CERTIFICATE	held confidential until certificate is issued (7 U.S.C. 2426).
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
HARPOOL SEED INC.	78DW14	MILBURN
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)		FOR OFFICIAL USE ONLY
		PVPO NUMBER
		8500203
DRAWER B DENTON, TEXAS 76202	817-387-0541	
6. GENUS AND SPECIES NAME 7. FAMILY NAME		DATE
		September 3, 1985
		2:00 DAM XIPM
TRITICUM aestivum L. GRAMINE	AF.	2.00 A.M. 1 P.M.
	DATE OF DETERMINATION	AMOUNT FOR FILING
		g s1_800_00
		DATE 9/3/85
WHEAT	JUNE 1984	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM	OF ORGANIZATION (Corporation,	
partnership, association, etc.)		\$ \$200 000 H DATE
CORPORATION		July 12,1988
11. IF INCORPORATED, GIVE STATE OF INCORPORATION	Land the state of	12. DATE OF INCORPORATION
TEXAS		1962
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), I	F ANY, TO SERVE IN THIS APPLI	CATION AND RECEIVE ALL PAPERS
LEALAND DEAN		
HARPOOL SEED INC.		
		017_207_05/.1
DRAWER B, DENTON, TEXAS 76202	PHONE (Include an	ea codej: 817-387-0541
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMIT	TTED	The state of the s
Exhibit A, Origin and Breeding History of the Variety (See	Evhibit C Objective [Description of the Variety (Request form
a. Section 52 of the Plant Variety Protection Act.)	c. X Exhibit C, Objective L from Plant Variety Pre	otection Office.)
b. X Exhibit B, Novelty Statement	d. X Exhibit D, Additional	Description of the Variety
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARI SEED? (See Section 83(a) of the Plant Variety Protection Act.)		·
		items 16 and 17 below) No
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	17. IF "YES" TO ITEM 16, 1	WHICH CLASSES OF PRODUCTION ED?
		Registered Certified
Yes X No	Foundation	
18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VAR	IETY IN THE U.S.?	Yes (If "Yes," give date)
	· ·	No No
10 HACTHE VARIETY BEEN OFFEDER FOR CALE OF MACKET	D IN THE U.S. OR OTHER COUNT	
19. HAS THE VARIETY BEEN OFFERED FOR SALE OR MARKETE	D IN THE U.S. ON OTHER COUNT	Yes (If "Yes," give names
		of countries and dates)
		Ř7 No
20. The applicant(s) declare(s) that a viable sample of basic seed	a of this variety will be furnished	d with the application and will be re-
plenished upon request in accordance with such regulations		with the apprearion and win be to
	7.7	minery and helievelel that the variety is
The undersigned applicant(s) is (are) the owner(s) of this see distinct, uniform, and stable as required in Section 41, and i	s entitled to protection under th	ne provisions of Section 42 of the Plant
Variety Protection Act.	• • • • • • • • • • • • • • • • • • •	
Applicant(s) is (are) informed that false representation herei	n can jeopardize protection and	result in penalties.
SIGNATURE OF APPLICANT		DATE
to the some		28 AUG. 85
SIGNATURE OF APPLICANT	4	DATE
		\mathcal{I}
FORM WA-470 (3-84) (Formerly LMGS-470 (8-83) which is obsolete.)	

Exhibit A.

Origin and Breeding History of the Variety 'Milburn' Wheat

- 1977 Selected from segregating bulk hybrid population from Mexico. Exact pedigree of variety is unknown, but is suspected to be a hard red winter x hard red spring cross.
- 1978 Planted in head row
- 1979 Planted in single row observation plot
- 1980 Planted in preliminary yield trials
- 1981 Planted in preliminary yield trials
- 1982 Planted in advanced yield trials
- 1983 Planted in advanced yield trials small increase
- 1984 Increase block, entry into Southern Regional Performance Nursery. Advanced Yield Trials.

Variants up to the following levels may be expected in this variety. White Awned 1/1000.

After several years of testing and observation this variety has been determined to be genetically uniform and stable.

EXIBIT B

Milburn is most similar to Bezostaya, except that Milburn is red chaffed at maturity.

Exhibit B

Data Indicative of Novelty

Novelty is based upon the observation, that the breeder is unaware of any other commercially available hard red winter wheat that is both red chaffed and awnletted. Weather master 135 and 'Russian' are both awnletted but both are white. TAM 105 is red chaffed but awned.

U. S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, MEAT, GRAIN AND SEED DIVISION BELTSVILLE, MARYLAND 20785

EXHIBIT C (Whoat)

OBJECTIVE DESCRIP	
NAME OF APPLYCANTIST	FOR OFFICIAL USE ONLY
HARPOOL SEED INC. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	PYPO NUMBER 8500203
DRAWER B	VARIETY NAME OR TEMPORARY DESIGNATION
DENTON, TEXAS 76202	MILBURN
Place the appropriate number that describes the varietal character of Place a zero in first box (e-s. 0 8 9 or 0 9) when number is	f this variety in the boxes below. either 99 or less or 9 or less.
1. KIND: 1 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = 1	POLISH 6 = POULARD 7 = CLUB
2. TYPE,	
2 1 = SPRING 2 = WINTER 3 = OTHER (Specity)	1 = SOFT 3 = OTHER (Specify) 2 = HARD
2 1 = WHITE 2 = RED 3 = OTHER (Specify)	
3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:	
1 5. 0 FIRST XXXXXXXIX HEADING	LAST FLOWERING
4. MATURITY (50% Flowering):	
0 8 NO. OF DAYS EARLIER THAN	2 1 = ARTHUR 2 = SCOU 66 3 = CHRIS
NO. OF DAYS LATER THAN	4 = LEMHI 5 = NUGAINES 6 = LEEDS
5. PLANT HEIGHT (From soil level to top of head):	
9 2 .9 CM. HIGH	
CM. TALLER THAN	2 = SCOUT 66 3 = CHRIS
8.7 CM. SHORTER THAN	1 = ARTHUR 2 = SCOUT 66 3 = CHRIS 2 4 = LEMNI 5 = NUGAINES 6 = LEEDS
, PLANT COLOR AT BOOTING (See reverse): 7.	ANTHER COLOR:
2 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN	1 1 = YELLOW 2 = PURPLE
. STEM:	
1 Anthocyanin: 1 = ABSENT 2 = PRESENT	2 Waxy bloom: 1 = ABSENT 2 = PRESENT
Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT	1 Internodes: 1 = HOLLOW 2 = SOLID
0 4 NO. OF NODES (Originating from node above ground)	2 2 CM. INTERNODE LENGTH BETWEEN FLAG LEAF
. AURICLES:	
1 Anthocyanin: 1 = ABSENT 2 = PRESENT	1 Hairiness: 1 = ABSENT 2 = PRESENT
), LEAF:	
Flag leaf at 1 = ERECT 2 = RECURVED booting stage: 3 = OTHER (Specify):	Flag leaf: 1 = NOT TWISTED 2 = TWISTED
I Hairs of first leaf sheath: I = ABSENT 2 = PRESENT	2 Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT
0 9 MM. LEAF WIDTH (First leaf below flag leaf)	2 6 CM. LEAF LENGTH (First lost bolow flag lost):
	the state of the s

11. HEAD:		
2 Density: 1 = LAX	2 = DENSE	Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER (Specify)
3 Awnedness: 1 = AWN	HESS 2 = APICALLY AWNUETED 3	= AWNLETED 4 = AWNED
Color at maturity: 1	# WHITE 2 = YELLOW 3 = PINK 4 = = BROWN 6 = BLACK 7 = OTHE	R (Specify):
0 9 CM. LENGTH	to the second of	0 9 MM. WIDTH
12. GLUMES AT MATURI Length: 1 = SHORT 3 = LONG (6)	(CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.)	Width: $1 \approx NARROW(CA. 3 mm.)$ $2 \approx MEDIUM(CA. 3.5 mm.)$ $3 = WIDE(CA. 4 mm.)$
Shoulder 1 = WANTI shape: 4 = SQUAF	NG 2 = OBLIQUE 3 = ROUNDED RE 5 = ELEVATED 6 = APICULATE	Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE
13. COLEOPTILE COLOR:	Francisco de la companya della companya della companya de la companya de la companya della compa	14: SEEDLING ANTHOCYANIN:
1 1 = WHITE 2 = RE		1 1 = ABSENT 2 = PRESENT
15. JUVENILE PLANT GR	OWTH HABIT:	
1 = PROSTRATE	2 = SEMI-ERECT 3 = EREC	τ 3 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -
16. SEED:		
<u>; </u>	2 = OVAL 3 = ELLIPTICAL	Cheek: I = ROUNDED 2 = ANGULAR
Brush: 1 = SHORT	2 = MEDIUM 3 = LONG	Brush: 1 = NOT COLLARED 2 = COLLARED
Phenol reaction (See instructions):	1 = IVORY 2 = FAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK	
Color: 1 = WHITE	2 = AMBER 3 = RED 4 = PURPLE	S = OTHER (Specify)
0 6 MM. LENGTH	0 3 MM. WIDTH	3 5 GM. PER 1000 SEEDS
17. SEED CREASE:		
Width: = 60% OR L	ESS OF KERNEL 'WINOKA'	Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT'
2 = 80 % OB 15	ESS OF KERNEL 'CHRIS'	2 = 35% OR LESS OF KERNEL 'CHRIS'
	AS WIDE AS KERNEL "LEMHI"	3 = 50% OR LESS OF KERNEL 'LEMHI'
	·····	
STEM RUST (Races)	2 LEAF RUST MODERATE (Races) RES. PREV. RAC	CES STRIPE RUST LOOSE SMUT
2 POWDERY MILDEW	0 BUNT	O OTHER (Specify)
19. INSECT: (0 = Not Teste	d, 1 = Susceptible, 2 = Resistant)	
0 SAWFLY	APHID (Bydv.)	1 GREEN BUG CEREAL LEAF BEETLE
OTHER (Specify)	HESSIAN FLY	0 GP 0 A 0 B 0 C
	RACES:	0 D E 0 F 0 G
20. INDICATE WHICH VARI	ETY MOST CLOSELY RESEMBLES THAT S	I/BMITTED:
CHARACTER	NAME OF VARIETY	CHARACTER NAME OF VARIETY
		Seed size
Plant tillering	BEZOSTAYA	
<u>Leaf size</u>		Seed shape
Leaf color	11	Coleoptile elongation
Leaf carriage	11	Seedling pigmentation

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for complexing this form:

- (a) L.W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.
- (b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

LEAF COLOR: Nickerson's or any recognized color fan should be used to determine the leaf color of the described variety.

Exhibit D

Additional Description of the Variety 'Milburn'

'Milburn' is a hard red winter wheat derived from a segregating bulk population obtained from Mexico. The exact pedigree is unknown, but is suspected to be the result of a cross between a hard red winter and hard red spring wheat. Winter growth habit is semi-prostrate.

In 1984 tests at Dallas, Texas, 'Milburn' was eight (8) days earlier than 'Scout 66', but at Amarillo, Texas, was approximately four (4) days later. In comparison with TAM 105, the same year, 'Milburn' at Denton and Dallas, Texas was 3-4 days earlier, but approximately 3 days later at Amarillo. This would indicate a sensitivity to day length.

Plant height averages 92.9 cm which is 8.7 cm. Shorter than Scout 66. Stems, exhibit hollow internodes, lack Anthocyanin, have a waxy bloom, and average 4 above ground nodes.

Plant color at booting is green, with the flag leaf being recurved and non-twisted. Auricles, are without anthocyanin and are glaborus. The first leaf sheath is glaborus but has a waxy bloom. Leaves average 9 mm in width with an average length of 26 cm.

Heads are dense, strap shaped, awnleted, and brown in color at maturity, averaging 9 cm in length and 9 mm in width. Glumes are long, wide with oblique shoulders and obtuse beaks.

Seed are red, ovate, with rounded cheeks, a medium length, not collared brush, and average 6 mm in length and 3 mm in width. Phenol reaction is light brown.

'Milburn' is resistant to the prevalent races of powdery mildew, at the time of release, is moderately resistant to the prevalent races of leaf rust, but is susceptible to loose smut.

MORRISON MILLING COMPANY DENTON, TEXAS

EXPERIMENTAL MILLING REPORT

	Date	3-85	
No. 45-85 Sample Identification Harport Milburn			
WHEAT ANALYSIS		WEIGHT	S OF PRODUCT
Moisture		Flour _	6810
Protein (AS is)		Bran	<i>2</i> 43.5
Protein (14% Basis)		Shorts	87.3g
Test Weight		Total _	1014.8
		% Ext	raction 67
Milling Remarks Yield 2.47		ling tin	ne-9 minutes
FLOUR	RANALYSIS		
FLOUR Approximate X MILL Commercial Mill Results			Approximate Commercial Mill Results
X MILL Commercial Mill Results		12 min).	Approximate Commercial Mill Results
X MILL Approximate Commercial Mill Results Moisture 13.05	X MILL	12 min. 3 min.	Approximate Commercial Mill Results
X MILL Approximate Commercial Mill Results Moisture 13.05	X MILL Time to 500 Line	3mis 42mis	Approximate Commercial Mill Results
X MILL Approximate Commercial Mill Results Moisture 13.05 Protein 11.20	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min.	3miu 42miu 150	Approximate Commercial Mill Results
X MILL Approximate Commercial Mill Results Moisture 13.05 Protein 11.20	X MILL Time to 500 Line Time to Peak Time on 500 Line	3mis 42mis	Approximate Commercial Mill Results
X MILL Approximate Commercial Mill Results Moisture 13.05 Protein 11.20	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min.	3miu 42miu 150	Approximate Commercial Mill Results
Approximate Commercial Mill Results Moisture 13.05 Protein 11.20 Ash 187	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min. MTI	3miu 42miu 150	Approximate Commercial Mill Results
X MILL Commercial Mill Results Moisture 13.05 Protein 11.20 Ash , 187	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min. MTI	3miu 42miu 150	Approximate Commercial Mill Results

Elle Sianza



C. W. BRABENDER INSTRUMENTS, INC. SOUTH HACKENSACK, N.J. U.S.A.

ADS 54.9	 Time To Feak Time on 590 Line Unite Drop End 20 Min WTI	42 min 150

MORRISON MILLING COMPANY DENTON, TEXAS

EXPERIMENTAL MILLING REPORT

HEAT ANALYSIS	.47-85 2001 Milbur a		WEIGHTS	OF PRODUCT
_			VIII	874.09
1sture			·	
otein (AS is) /4.35			Bran_	213.09
otein (14% Basis) 14.04			Shorts	143.19
at Weight(00 2		· · · · · · · · · · · · · · · · · · ·	Total	
			% Extr	action 7/
7. ` 4	1 226	Mi	llina ti	me - 8 min
ng Remarks	L 235			
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0				
0	FLOUR A	NALYSIS		
пт	FLOUR A Approximate Commercial Mill Results	NALYSIS X MILL		Approximate Commercial Mill Res
	Approximate		12 mw	Approximate Commercial Mill Res
ture /2.35	Approximate	X MILL	22 min	Approximate Commercial Mill Res
ture <u>/2.35</u> ein //.85	Approximate	X MILL Time to 500 Line Time to Peak Time on 500 Line	damin) 12 min	Approximate Commercial Mill Res
ture <u>/2.35</u> ein //.85	Approximate	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min.	270	Approximate Commercial Mill Res
ture <u>/2.35</u> ein //.85	Approximate	X MILL Time to 500 Line Time to Peak Time on 500 Line	damin) 12 min	Approximate Commercial Mill Res
ture <u>/2.35</u> ein //.85	Approximate	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min.	270	Approximate Commercial Mill Res
ture 12,35 ein 11.85 .510	Approximate	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min.	270	Approximate Commercial Mill Res
ein /1.85	Approximate	X MILL Time to 500 Line Time to Peak Time on 500 Line Drop End of 20 Min.	270	Approximate Commercial Mill Res

Chemist Chemist

8500203 999999999 C. W. BRABENDER INSTRUMENTS, INC. SOUTH HACKENSACK, N.I. U.S.A. X-mill rime To 500 Line # 417-85 Time To Peak dames Time on 500 Line Unite Drop End 20 Min _____20 Abs. 57.9

MINUTES

MINUTES

8500203

MORRISON MILLING COMPANY DENTON, TEXAS

EXPERIMENTAL MILLING REPORT

- No	56-83	·	Date	1-12-83	
ample Identification Harpool	HRW	78 DW	14		· · · · · · · · · · · · · · · · · · ·
WHEAT ANALYSIS		-		WEIGHT	S OF PRODUCT
Moisture				Flour .	870
Protein (AS is)	- -			Bran	456
Protein (14% Basis) 13.42				Shorts	79
Test Weight 59 \$				Total .	1405
				% Ext	raction 619
filling Remarks	······································				
K MILL	Approxima	ate	X MILL		Approximate Commercial Mill Result
Moisture /3 00			Time to 500 Line	12 min.	
Protein 10.90		·	Time to Peak	- 4 mis	
ish ,357			Time on 500 Line	4 mis	
			Drop End of 20 Min	<u> </u>	
		•	MTI	150	
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temarks Abs. 57.4	~				
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1986 Harpool Seed, Inc. Preliminary Group 2 Large Scale

The new variety Milburn (86-805) and the check variety Tam 105 (86-804) were submitted for 1986 large-scale evaluation. Milburn is an awnless ved-chaffed hard red winter wheat which exhibits excellent resistence to the prevelant races or powdery mildew, with moderate resistance to leaf rust and septoria. Milburn has the potential for excellent yields of both grain and forage. This variety has the same general maturity as Coker 68-15, Coker 916, Vona or Hawk. Since it is an awnless wheat, it lends itself to the stockman who wishes to graze wheat past heading.

EXPERIMENTAL

8500203

Sample # 86-805
Sample Group _2

Machinability - slack

Reported by: Rebecca Dibben
Name AIB Flour Quality Committee
Company American Institute of Baking
Address 1213 Bakers Way

Instructions: Circle the number following the description that best fits your evaluation. Please answer all questions. Remember to compare each experimental sample to the designated check for that group.

Eake Absorption (14	2. Loaf Vol	ume (actual c.c.) 2525 c.c.	3. Loaf Weight (grams) 457.5_g
Dough Characteristi Bucky-Tough Strong-Elastic Medium Pliable Mellow-Very Pliable Weak, Short-Sticky 7. a. Crumb Color White 5	5 Very Long 4.5 4 Long 3.5 3 Medium	g 5 4.5 4 3.5 3 2.5 2 1.5 1	6. Mixing Tolerance Excellent Tolerance 5 Good Tolerance 4.5 Average Tolerance 3.5 Poor Tolerance 2.5 V. Poor Tolerance 1.5 8. Overall Baking Quality
Creamy-White 4.5 4 3.5 Creamy Slightly Dull 2 1.5 Dull-Grey 1	Close, Uniform 4. S1. Open 3. Open 2. V. Open, Uneven 1	5 S1. Silky 4.5 5 S1. Silky-Harsh 3.5 5 Harsh 2.5	Excellent 5 4.5 Good 4 3.5 Med. Quality 3 Poor 2.5 V. Poor 1.5

Grain Science & Ind.

Shellenberger Hall Kansas State Univ. Manhattan, KS. 66506

EXIBIT E

Milburn is a variety developed and solely owned by Harpool Seed Inc. Box 29667 Dallas Texas 75229-0667